Amendments to the Specification:

On page 1, immediately after the first sentence which follows the title, please insert the following section headings:

BACKGROUND OF THE INVENTION

1. Field of the Invention

On page 1, immediately following the first full paragraph, please insert the following section heading:

2. Description of the Related Art

On page 2, please replace the last full paragraph with the following:

When an overly high signal is detected, an attack is immediately—no waiting phase is provided—activated, so a rapid gain lowering is started until an appropriate signal height is attained. At that moment or when the attack signal ceases to exist, the decay immediately begins (MOTOROLA Analog IC Device Device Data MC 1490 p. 7). So the gain rises slowly to a high level, on which the system persists till the next attack. ~~Said features are reflected in the preamble of claim 1~~. When the sine-shaped input signal is high for a fairly long time, the output amplitude is really lowered below the limit of a gain correcting activation, yet the decay again raises the output signal out of the linearity region and therefore the attack is activated once again. The system permanently switches over between the states of the attack and the decay. The attack rate must be several orders of magnitude above the decay rate, moreover, both rates must be matched to the nature and the frequency spectrum of the input signals.

On page 3, please replace the first full paragraph with the following:

In patent US 6,122,331 a circuit with an automatically settable gain is disclosed, wherein the attack ~~and the decay are~~is not activated ~~with a constant time delay after the signal has crossed the higher first and the lower second level, respectively. The~~ when a change in the gain becomes necessary, but wait phase is enforced. A next time ~~intervals~~ interval when the signal height is close to zero, ~~are~~ is selected as preferred gain transition region. ~~regions for the gain change of a continuous signal, whereby~~ Thus, an output signal is distorted to a lowest degree. The circuit is foreseen for continuous signals and does not exploit the characteristics of pulsating signals in the form of wave packets.

BRIEF SUMMARY OF THE INVENTION

On page 4, immediately following the first full paragraph, please insert the following section heading:

BRIEF DESCRIPTION OF THE DRAWINGS

On page 4, please replace the second full paragraph with the following:

The invention will now be explained in more detail by way of the description of an embodiment and with reference to the accompanying drawing, which in Fig. 1 represents an interrogator and data wave packets arriving from a relatively close transponder, a rather close transponder and a remote transponder, and ~~the sole Figure~~ Fig. 2 represents the time dependence of the voltage at an input and output of a receiver amplifier in ~~an~~ the interrogator, an attack signal and a decay signal and the time dependence of the voltage at the output of the receiver amplifier in a digital representation for the three wave packets having different intensities.

DETAILED DESCRIPTION OF THE INVENTION

On page 4, please replace the third and fourth full paragraphs with the following:

In a non-contacting identification system (Fig. 1), which consists of an interrogator and several transponders, an improved method for automatically setting the gain of an interrogator receiver is used.

The known method (MOTOROLA, *supra)*, according to which in a receiver amplifier of the interrogator an attack is activated each time when an amplified input signal exceeds an attack threshold voltage level Vatt and a decay is immediately activated after the attack has ended, is improved by the invention as follows.

On page 6, please replace the first and second full paragraphs with the following:

The method of the invention for automatically setting the gain of interrogator receiver within a non-contacting identification system functions as follows. The attack is immediately activated by the input signal Uin, the output signal Uout of which exceeds the attack threshold voltage level Vatt *(cf.* windows II and III in Fig. 2). The attack continues until the output signal Uout drops below the attack threshold voltage level Vatt. Then a waiting phase sets in, the length of which equals at least the length of the waiting period; during the waiting phase the gain remains unchanged. The decay is activated after the lapse of the waiting period, which started when the instantaneous amplified signal value for the last time after the end of the attack exceeded a waiting threshold voltage level Vw.

In a first window I in the Figure the input signal Uin for three successive data wave packets is shown: the packet a arrived from a relatively close transponder A, the packet b from a rather close transponder B and the packet c from a remote transponder C (Fig. 1). In the second window II the analogous output signal Uout corresponding to the data wave packets a, b, c, and the (positive) attack threshold voltage level Vatt and the waiting threshold voltage level Vw are plotted, whereas

the digital output signal U'out is represented in a window V. The digital output signal U'out for all three data wave packets a, b, c has nearly the same form in spite of their large difference in intensity. In windows III and IV an attack signal Uatt and a decay signal Udec are represented, which are activated in response to said three data wave packets a, b and c according to the proposed method.